

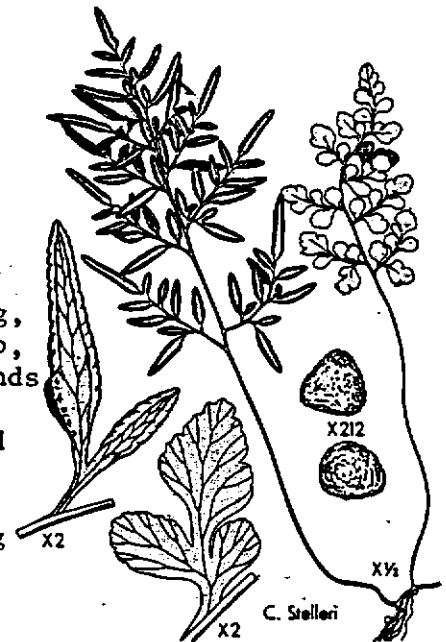
MASSACHUSETTS RARE AND ENDANGERED PLANTS

FRAGILE ROCK-BRAKE

(Cryptogamma stelleri S.G.Gmer.)

DESCRIPTION

Fragile Rock-brake is a small, delicate, slender fern with fronds (leaves of a fern) arising singly at intervals from a horizontal rhizome (underground stem). Fronds are dimorphic, or of two forms; sterile ones 1-8" (2.5-20cm.) long, ovate in outline, brownish toward base, green toward the tip, and 2-3 times dissected into roundish segments; fertile fronds up to 1' (31cm.) long, broadly lance-shaped, dark purple toward the base, green toward the tip, and 3 times dissected into slender segments with inrolled margins. The rachis (main stem) of the frond is green. It produces spores from mid-May to July. This species is very susceptible to drying in summer; whole colonies may wither and disappear by mid-July.



SIMILAR SPECIES IN MASSACHUSETTS

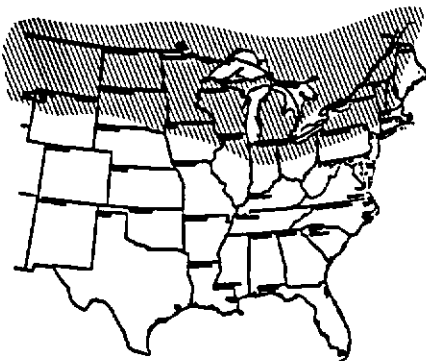
Young plants of Fragile Fern (Cystopteris fragilis) resemble sterile fronds of Fragile Rock-brake, but fronds are tufted or closely spaced, not spread out along the rhizome. To be sure of identification, you must note the presence of mature fronds of Cryptogamma, with their slender divisions and inrolled margins.

Gleason, H.A. The New Britton and Brown
Illustrated Flora of the Northeastern U.S.
and Adjacent Canada. New York Botanical Garden,
1952.

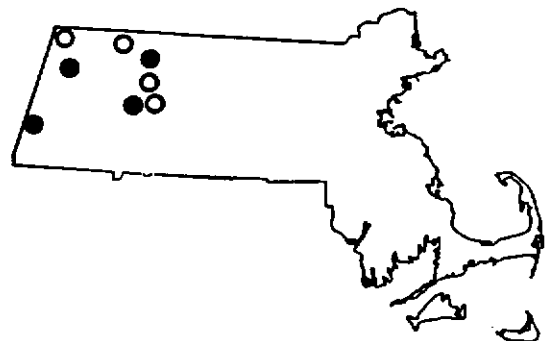
HABITAT IN MASSACHUSETTS

Fragile Rock-brake inhabits moist (usually dripping), shady, crevices and shelves, of vertical ledges; composed of chiefly calcareous conglomerate rock and limestone. Species found co-occurring with this Rock-brake include Cystopteris fragilis (Fragile Fern), Parietaria pensylvanica (Pennsylvania Pellitory), Carex eburnea (Bristle-leaved Sedge), Woodsia glabella (Smooth Woodsia), and Geranium robertianum (Herb Robert).

(continued overleaf)



Distribution of Fragile Rock-brake



● Verified since 1978
○ Reported prior to 1978

Distribution in Massachusetts by Town

FRAGILE ROCK-BRAKE (continued)

RANGE

Fragile Rock-brake is distributed from Newfoundland and Quebec to Alaska, south to northern New Jersey, West Virginia, Iowa, Utah, and Washington; also in Asia.

POPULATION STATUS

Fragile Rock-brake is considered "Threatened" in Massachusetts. Currently (1978 to present), 4 occurrences have been reported; historically 7 other occurrences have been recorded.